

actuated. For such an emergency sonic and light emission signaling, both the sonic alarm **16** and the light-emitting alarm **18** concurrently generate audible emissions and visual light emissions continuously, in a different number than that of forward movement or reverse movement or engine startup.

[0063] For example, the controller **12** in an emergency will actuate the sonic alarm **16** and all forward and rearward facing light-emitting alarms **18** to energize simultaneously and generate bursts of four honks and four flashes respectively, with short durations between each segment or burst of no sound or light. For example, four sound bursts and four light flashes over two seconds, and a one second break with no sound or light. Such will continue until the emergency switch **22** is deactivated.

[0064] As noted, to enhance the system **10** performance, a proximate sound sensor **24** may be included which will communicate information to the controller **12** and software thereon, concerning the current sound and noise conditions which are proximate to the vehicle and the workers surrounding it. Sound sampling software on the controller **12** running to the task of optimizing the audible signal emitted from the sonic alarm **16** to one maximizing **25** what humans can best hear based on the sensed sound and noise conditions of the sound sensor **24**, will choose a sound and volume for emission from the sonic alarm **16**, which is optimized for hearing by workers and pedestrians proximate to the vehicle and being subjected to the current sound and noise sensed. Such will insure that the audible sounds from the sonic alarm **16** are generated in a tone, frequency, and volume best suited to the current conditions.

[0065] Finally, the system **10**, herein, may also optimize the color and frequency and flashing duration and the brightness of the light emitted from the light-emitting alarm **18**, to adjust and maximize such for human eyesight according to the current lighting conditions surrounding the vehicle. Using electronic signals from a light condition sensor **26** as to the current brightness and darkness conditions, the controller **12** running light sampling software operating to the task of adjusting light emissions to maximize viewing **27**, can choose the most visible light color or frequency which can be discerned by humans under current lighting conditions. The light sampling software running to the task of maximizing viewability will calculate a light color and/or light frequency and/or flash duration or other light emission aspect to that which a human will most easily see and discern while positioned proximate to the vehicle in the determined lighting conditions from the light condition sensor **26**.

[0066] The controller **12** based on the determination of the light sampling software running to the task of determining a light emission to maximize it for human viewing, will cause the light emitting alarm **18** such as an LED or strobe light, to alter the emitted light to a color or to a frequency determined and or to a brightness, to be best seen by humans proximate to the vehicle at the current time. Further, adjustments can be made to the duration of the flashes of light generated, as well as the brightness, in order to maximize the discerning of light emitted by the light emitting alarm **18**, by humans and to avoid causing a blinding effect which can occur in low light conditions.

[0067] Finally, as noted above, the system **10** herein can include the function of automatically adapting the number of emissions of the sonic and visual light warnings to the

company using the vehicle. This automatic adjustment of the number of sounds generated and number of light emissions for each specific company may be accomplished using GPS or Cellular Phone triangulation software to determine the geographic location of the vehicle from a location receiver **29**. Using company determination software running on or engaged with the controller **12**, which operates to the task of determining a company using the vehicle from a geographic location of the vehicle and correlating such to a user company and the sonic warnings and light emission warnings employed by the company, in a warning generation database. The company determination software will then cause the controller **12** to adjust the sound emissions generated for movements of the vehicle and the lighting emissions by light emitters of that vehicle to those associated with the company. Alternatively, the location receiver **29**, can be configured to scan an employee driver company identification and ascertain the company employing the driver, and then adjusting the lighting emissions and sonic emissions accordingly.

What is claimed is:

1. A system for automatic controlling of sonic and visual warnings on a vehicle, comprising:

a controller having a computer processor and electronic memory engaged therewith, said controller operatively positioned on a vehicle;

a sonic alarm positioned on said vehicle;

a light emitting alarm positioned on said vehicle;

an ignition sensor communicating an ignition signal to said controller only when an engine on said vehicle is being started;

engine operation software operating in said electronic memory of said controller, said engine operating software operating to the task upon receipt of said ignition signal, to communicate a startup signal to said sonic alarm to cause it to emit a startup sonic warning sound therefrom, and communicating said startup signal to said light emitting alarm to cause it to emit a startup warning light therefrom.

2. The system of claim 1, additionally comprising:

a vehicle direction sensor engaged to said vehicle, said vehicle direction sensor communicating a forward direction signal to said controller when said vehicle is moving forward and communicating a reverse direction signal when said vehicle is moving rearward;

directional software running in said electronic memory of said controller;

said directional software operating to the task upon receipt of said forward direction signal, of causing said sonic alarm to emit a forward motion sonic warning and concurrently causing said light emitting alarm to emit a forward motion light emission therefrom; and said directional software operating to the task upon receipt of said reverse direction signal, of causing said sonic alarm to emit a reverse motion sonic warning and concurrently causing said light emitting alarm to emit a reverse motion light emission therefrom.

3. The system of claim 2 additionally comprising:

a light condition sensor which communicates a lighting signal to said controller, said lighting signal correlating to the current lighting conditions of an area surrounding said vehicle in which human workers are positioned; light sampling software running in said electronic memory of said controller;